Post-Remedial Excavation Confirmation Sample Report Parcel A, Report No. 1

McDonnell Douglas C-6 Facility
Los Angeles, California

May 1997

MONTGOMERY WATSON

POST-REMEDIAL EXCAVATION CONFIRMATION SAMPLE REPORT PARCEL A REPORT NO. 1

McDONNELL DOUGLAS C-6 FACILITY LOS ANGELES, CALIFORNIA

May 1997

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SECTION 1.0

INTRODUCTION

In October, 1996, Montgomery Watson (Montgomery) was retained by McDonnell Douglas Realty Company (MDRC) to assist with the redevelopment of Parcel A (the Site) of their C-6 facility located in Los Angeles, California. Figure 1 presents the C-6 facility. Figure 2 delineates the Site. The Site was formerly used to manufacture and store aircraft parts.

1.1 OVERVIEW

The Site consists of the northernmost quarter of the C-6 facility, encompassing approximately 50 acres. Demolition of many of the following buildings at the Site is underway: Building 29, 33, 34, 36, 37, 41, 43/44, 45, 57, 58, 61, 66-A and 67.

Information gathered during the data compilation and evaluation phase of this project indicated historical industrial activities at the Site may have released petroleum products and hazardous substances to the surface and subsurface.

A soil sampling and remedial excavation effort is being conducted in conjunction with the removal of foundations, slabs, and below-ground structures. The purpose of this effort is to assess soil quality and remove soil affected with petroleum hydrocarbons and other chemicals in preparation for redevelopment of the Site. Soil which is determined to be affected with petroleum hydrocarbons and other chemicals is excavated and stockpiled at the Site. Confirmation samples are collected along the walls and floor of each remedial excavation to ensure that affected soil has been removed.

As of the date of this report, remedial excavations have been conducted only in Building 37.

1.2 PURPOSE AND OBJECTIVE

This document presents the results of the confirmation sampling conducted in the Building 37 excavation area. The results will be used to confirm that the area, which was contaminated with petroleum hydrocarbons and other chemicals, has been excavated to acceptable levels. The final residual chemical concentrations in the excavated area must meet cleanup criteria established for the Site and the C-6 facility.

Along with its companion document, *Soil Stockpile Report, Parcel A, Report No. 1* (Montgomery Watson, 1997), this report documents that the Site excavation efforts meet the established cleanup criteria and therefore protect drinking water and the health of future users.

SECTION 2.0

BUILDING 37 REMEDIAL EXCAVATIONS

Building 37 housed foundry operations in the south central portion of the building, and large machine presses and lathes throughout the building. Foundry and press machines were contained in 15 large pits (approximately 8 feet deep, 20 feet wide, and 60 feet long). A ground floor room on the east side of the building housed the tooling department where employees would produce parts for the machines throughout the facility. A parts cleaning tank sat in a sump within this room. Two clarifiers were located outside the east wall of the building. A hydraulically-powered elevator was located inside the northeast portion of the building.

A 20 feet by 20 feet grid has been superimposed over the footprint of Building 37 as presented in Figure 3. As of the date of this report, two remedial excavations have been completed and two are in progress. The location of each remedial excavation is presented in Figure 3. Remedial excavations are recorded using the following nomenclature :

Building No. (B#) - Remedial Excavation (RE) - Chronological Number (#)
e.g., B37-RE-1

Pertinent information related to each of the Building 37 remedial excavations and the stockpiled soils is presented below.

Excavation/Stockpile	Approximate Volume	Date of Excavation	Stockpile Location(s)
B37-RE-1	200 cu yds	7 Feb 97	Southeast of Building 37
B37-RE-2	170 cu yds	28 Feb 97	East of Building 29
B37-RE-3	35 cu yds	3 Mar 97	East of Building 29
B37-RE-4/(A1 - H) B37-RE-4/(I - T)	8,610 cu yds total	3 Mar 97 — 17 Apr 97	Stockpiles designated "A1" through "H" located east of Building 29. Stockpiles designated "I" through "T" located within and adjacent to the Building 37 footprint.

2.1 SOIL SAMPLING AND EXCAVATING

Grid sampling and hot spot sampling has been employed at Building 37 to identify affected soil and to evaluate the need to remove it through remedial excavation. Detailed procedures for these activities are outlined in the *Sampling and Analysis Plan for Demolition Activities at the Douglas Aircraft Company C-6 Facility* prepared by Integrated Environmental Services, Inc. and previously submitted to the Regional Water Quality Control Board (RWQCB). These procedures used to assess soil quality and determine if remedial excavation is necessary can be summarized as follows:

Grid Sampling: The systematic collection of soil samples at predetermined, regular intervals of a grid placed over the footprint of Building 37. A 20 feet by 20 feet grid is being employed. A photoionization detector (PID) is used to measure headspace organic vapor concentrations in the freshly exposed soil at each grid node. Soil samples are collected for analysis where at least one of the following conditions exist: 1) the headspace VOC reading exceeds 5 ppm. (2) areas where staining of the soil is visible, or (3) areas where odors are noticeable. Generally, grid samples have been analyzed according to the analytical schedule presented in Table 1.

Hot Spot Sampling: Hot spot sampling is conducted at pre-determined locations where former items of concern were located (e.g., pits, sumps), and at other locations where demolition activities reveal soil which may have been affected by petroleum hydrocarbons or other chemicals of concern. Hot spot samples are collected for chemical analysis from a location where at least one of the following conditions exist: (1) the headspace VOC reading exceeds 5 ppm. (2) areas where staining of the soil is visible, or (3) areas where odors are noticeable. Generally, hot spot samples have been analyzed according to the analytical schedule presented in Table 1.

Remedial excavation to remove affected soil is conducted when one of the following conditions are discovered: (1) elevated PID readings, (2) visible staining, or (3) noticeable odors. A conservative approach is being employed such that soil which exhibits any of these characteristics is excavated and stockpiled.

Remedial excavations are being performed using heavy equipment (excavators, front-end loaders) associated with the building demolition effort. Air monitoring in accordance with South Coast Air Quality Management District Rule 1166 is being conducted.

The maximum depth of any excavation is approximately 10 feet below grade. Excavated soil is segregated based on the location from where it is removed. Soil stockpiles are placed on asphalt or plastic sheeting, and covered with plastic sheeting to protect the soil from the elements. A sample of the excavated soil (stockpile sample) is collected and analyzed for approximately each 250 cubic yards of material.

Stockpile sampling: Stockpile samples are collected at a frequency of approximately one sample per 250 cubic yards of soil removed. Generally, two sampling methods have been employed: First, samples from the actual stockpiled soil have been collected by using a shovel to cut vertically into the side of a stockpile at each sample location to expose "fresh" soil; samples are then collected from the exposed vertical wall. Second, stockpile samples have been collected from the bucket of the excavator as the soil is being removed by first exposing "fresh" soil beneath the surface using a stainless steel utensil or similar device.

Additionally, representatives of the RWQCB requested the collection and analysis of additional stockpile confirmation samples to verify and confirm the concentrations of chemicals in excavated soil. Confirmation stockpile samples were collected using the first method of collection described above from the sides of the stockpiled soil.

Generally, stockpile and stockpile confirmation samples have been analyzed according to the analytical schedule presented in Table 1.

2.2 CONFIRMATION SAMPLING

Confirmation sampling is conducted to ensure that affected soil has been removed from each excavation. Confirmation sampling is conducted when field judgment indicates that all affected soil has been removed. Confirmation sampling is conducted at a frequency of at least one sample location each 20 feet along the walls and floor of each excavation.

A PID is used to measure headspace organic vapor concentrations in the freshly exposed soil at each sample location. Soil samples are collected for analysis when any of the following conditions exist: 1) the headspace VOC reading is less than or equal to 5 ppm, (2) soil staining is not visible, and (3) odors are not noticeable.

Confirmation soil samples are collected by first exposing "fresh" soil beneath the surface of a wall and floor of an excavation using a stainless steel utensil or similar device. Soil samples are collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet. The ends of the sleeves are then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature is written in indelible ink on a sample label and attached to the sleeve.

Building No. (B#) - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)
e.g., B37-GS-42-3'

Sample sleeves are placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Generally, confirmation samples have been analyzed according to the analytical schedule presented in Table 1.

2.3 IN SITU SOIL QUALITY

2.3.1 B37-RE-1 Remedial Excavation

Remedial excavation B37-RE-1 was completed on February 7, 1997. Approximately 200 cubic yards of stockpiled soil associated with B37-RE-1 was removed with an excavator, transported in a front-end loader, and stockpiled southeast of Building 37.

Seven confirmation samples were collected at locations presented in Figure 4. The analytical data for these samples are summarized in Table 2. A complete set of laboratory analytical reports is presented in Appendix A-1.

2.3.2 B37-RE-2 Remedial Excavation

Remedial excavation B37-RE-2 was completed on February 28, 1997. Approximately 170 cubic yards of stockpiled soil associated with B37-RE-2 has been removed with an excavator, transported in a front-end loader, and stockpiled east of Building 29.

Six confirmation samples were collected at locations presented in Figure 5. The analytical data for these samples are summarized in Table 3. A complete set of laboratory analytical reports is presented in Appendix A-2.

2.3.3 B37-RE-3 Remedial Excavation

Remedial excavation B37-RE-3 was completed on March 3, 1997. Approximately 35 cubic yards of stockpiled soil associated with B37-RE-3 was removed with an excavator, transported in a front-end loader, and stockpiled east of Building 29.

Five confirmation samples were collected at locations presented in Figure 6. The analytical data for these samples are summarized in Table 4. A complete set of laboratory analytical reports is presented in Appendix A-3.

2.3.4 B37-RE-4 Remedial Excavation

Remedial excavation B37-RE-4 began on March 3, 1997 and was completed on April 17, 1997. Approximately 8,610 cubic yards of stockpiled soil associated with B37-RE-4 was removed with an excavator, transported by truck, and stockpiled in two separate locations: east of Building 29, and within and adjacent to the footprint of Building 37.

Forty-nine confirmation samples have been collected at locations presented in Figure 7. The analytical data for these samples are summarized in Table 5. A complete set of laboratory analytical reports is presented in Appendix A-4.

SECTION 3.0

DATA SUMMARY AND CONCLUSIONS

This section summarizes the confirmation sampling data from each remedial excavation and concludes whether all affected soil has been removed, or if additional excavation of affected soil is warranted to be protective of drinking water and human health.

3.1 SOIL SCREENING METHODOLOGY

The soil screening criteria have been developed to satisfy two primary objectives: (1) residual concentrations in soil must be below levels projected to impact underlying drinking water sources, and (2) residual concentrations must be below levels projected to potentially impact human health under future construction and commercial/industrial activities at the Site.

In accordance with these objectives, individual screening criteria were developed for both drinking water and human health protection. The development of each of these screening criteria is discussed below followed by a summary of how these values will be implemented in the evaluation of whether soil which remains at each remedial excavation meets the soil screening criteria.

Chemicals of concern at the Site can be summarized as follows:

- Petroleum hydrocarbons
- VOCs
- SVOCs
- PCBs
- Metals

Drinking Water

The generalized hydrostratigraphic succession at the Site is as follows (Kennedy/Jenks, 1996(b); Dames & Moore, 1993; Department of Water Resources, 1961):

SURFACE
Bellflower Aquitard
Gage Aquifer
El Segundo Aquitard
Lynwood Aquifer

Depth to groundwater at the Site is approximately 65 feet. Hydrostratigraphic information from voluminous data collected at the neighboring Del Amo and Montrose Chemical Superfund Sites can be correlated with subsurface information collected at the Site. Hydrostratigraphic correlations suggest that the shallowest groundwater at the Site occurs in the Bellflower Aquitard, which is not recognized as a drinking water source in the region (Dames & Moore, 1993).

Although the depth to the top of the Gage Aquifer should vary from approximately 120 to 150 feet (from west to east) across the Site, the Gage Aquifer is not utilized as a source of drinking water in the region (Dames & Moore, 1993). Consequently, the shallowest drinking water resource in the region would therefore be the Lynwood Aquifer, projected to occur at the depths of approximately 210 to 240 feet (from west to east) across the Site.

Based on the depth to the first drinking water source, the following permissible concentrations have been approved by the RWQCB:

Analytes	Permissible Level
TRPH	
C4 - C12 (VOCs)	2000 mg/kg
C13 - C22 (SVOCs)	10,000 mg/kg
C22+ (Heavy Ends)	50,000 mg/kg
Metals	TTLC and 10 times STLC

Note:
A waste extraction test is performed on samples with concentrations greater than 10 times STLC but less than TTLC, per CCR Title 22.

Human Health

Site-specific health-based screening criteria (HBSC) were developed by Integrated Environmental Services, Inc. using standard United States Environmental Protection Agency (USEPA) and California Environmental Protection Agency (Cal/EPA) methodologies. HBSC values were derived assuming future commercial industrial land use with an interim construction phase. Each HBSC will be used as a predictor of the risk posed by individual VOC, SVOC, PCB and metal contaminants in soil. The additive effects of multiple contaminants have been accounted for by setting target risk levels at $1x10^{-6}$ for carcinogens and 0.2 for toxicants. The final cumulative risks for all contaminants will be addressed in the post-remedial risk assessment. Table 6 summarizes the HBSCs to be used at the Site. Appendix B provides a more detailed discussion of the methodologies used to derive these values.

Evaluation Process

All confirmation soil data at the Site will undergo the soil screening evaluation process depicted in Figure 8. This evaluation process incorporates both drinking water and human

health based criteria. Additional soil excavation and/or treatment will be required at locations where confirmation sample data fail any portion of this test.

3.2 REMEDIAL EXCAVATION EVALUATIONS

3.2.1 B37-RE-1 Remedial Excavation

Confirmation sample data are presented in Table 2 and can be summarized as follows:

Petroleum Hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this remedial excavation was 56 mg/kg (sample B37-GS-25). This concentration is below the permissible limits for petroleum hydrocarbons.

VOCs: All concentrations of VOCs were below their respective HBSC value.

SVOCs: Confirmation samples for B37-RE-1 were not analyzed for SVOCs.

PCBs: Confirmation samples for B37-RE-1 were not analyzed for PCBs as there was no indication of PCB usage in this area based on review of historical operations.

Metals: All concentrations were below their respective TTLC, 10 times STLC, and HBSC values.

Conclusion: The data indicate that the residual soils in B37-RE-1 are protective of drinking water and human health. Approval to backfill this excavation is requested.

3.2.2 B37-RE-2 Remedial Excavation

Confirmation sample data are presented in Table 3 and can be summarized as follows:

Petroleum hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this remedial excavation was 3,900 mg/kg (sample B37-GS-52-4'). A carbon chain analysis was not performed on this sample because the concentration was below the 10,000 mg/kg threshold concentration.

VOCs: Sample B37-GS-52-4' was analyzed for VOCs and none were detected.

SVOCs Bis(2-ethylhexyl)phthalate was detected in sample B37-GS-52-4' in concentration of 2.10 mg/kg. This value is below the 2100 mg/kg bis(2-ethylhexyl)phthalate HBSC value.

PCBs: Sample B37-GS-52-4' was analyzed for PCBs and none were detected.

Metals: All concentrations were below their respective TTLC, 10 times STLC, and HBSC values.

Conclusion: The data indicate that the residual soils in B37-RE-2 are protective of drinking water and human health. Approval to backfill this excavation is requested.

3.2.3 B37-RE-3 Remedial Excavation

Confirmation sample data are presented in Table 4 and can be summarized as follows:

Petroleum hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this remedial excavation was 49 mg/kg (sample B37-GS-59-6'). This concentration is below the permissible limits for petroleum hydrocarbons.

VOCs: Sample B37-GS-59-6' was analyzed for VOCs and none were detected.

SVOCs: Sample B37-GS-59-6' was analyzed for SVOCs and none were detected.

PCBs: Sample B37-GS-59-6' was analyzed for PCBs and none were detected.

Metals: All concentrations were below their respective TTLC, 10 times STLC, and HBSC values.

Conclusion: The data indicate that the residual soils in B37-RE-3 are protective of drinking water and human health. Approval to backfill this excavation is requested.

3.2.4 B37-RE-4 Remedial Excavation

Confirmation sample data are presented in Table 5 and can be summarized as follows:

Petroleum hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this remedial excavation was 1,100 mg/kg (sample B37-GS-88-2.5'). This concentration is below the permissible limits for petroleum hydrocarbons.

VOCs: Twenty-four confirmation samples have been submitted for analysis of VOCs and none were detected.

SVOCs: Twenty-four confirmation samples have been submitted for analysis of SVOCs and none were detected.

PCBs: Three confirmation samples have been submitted for analysis of PCBs and none were detected.

Metals: All concentrations were below their respective TTLC, 10 times STLC, and HBSC values.

Conclusion: The data indicate that the residual soils in B37-RE-4 are protective of drinking water and human health. Approval to backfill this excavation is requested.

SECTION 4.0

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Figures

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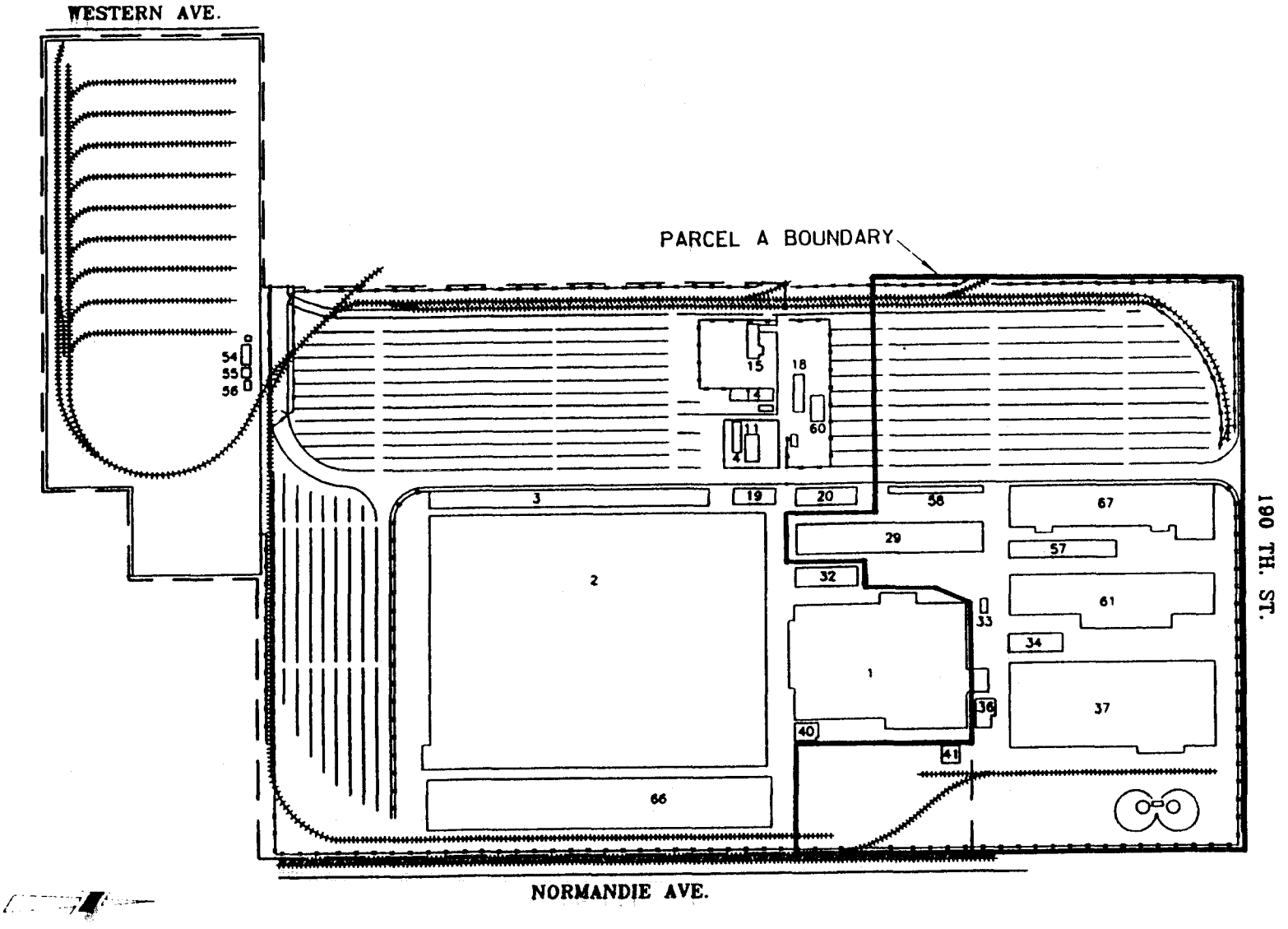
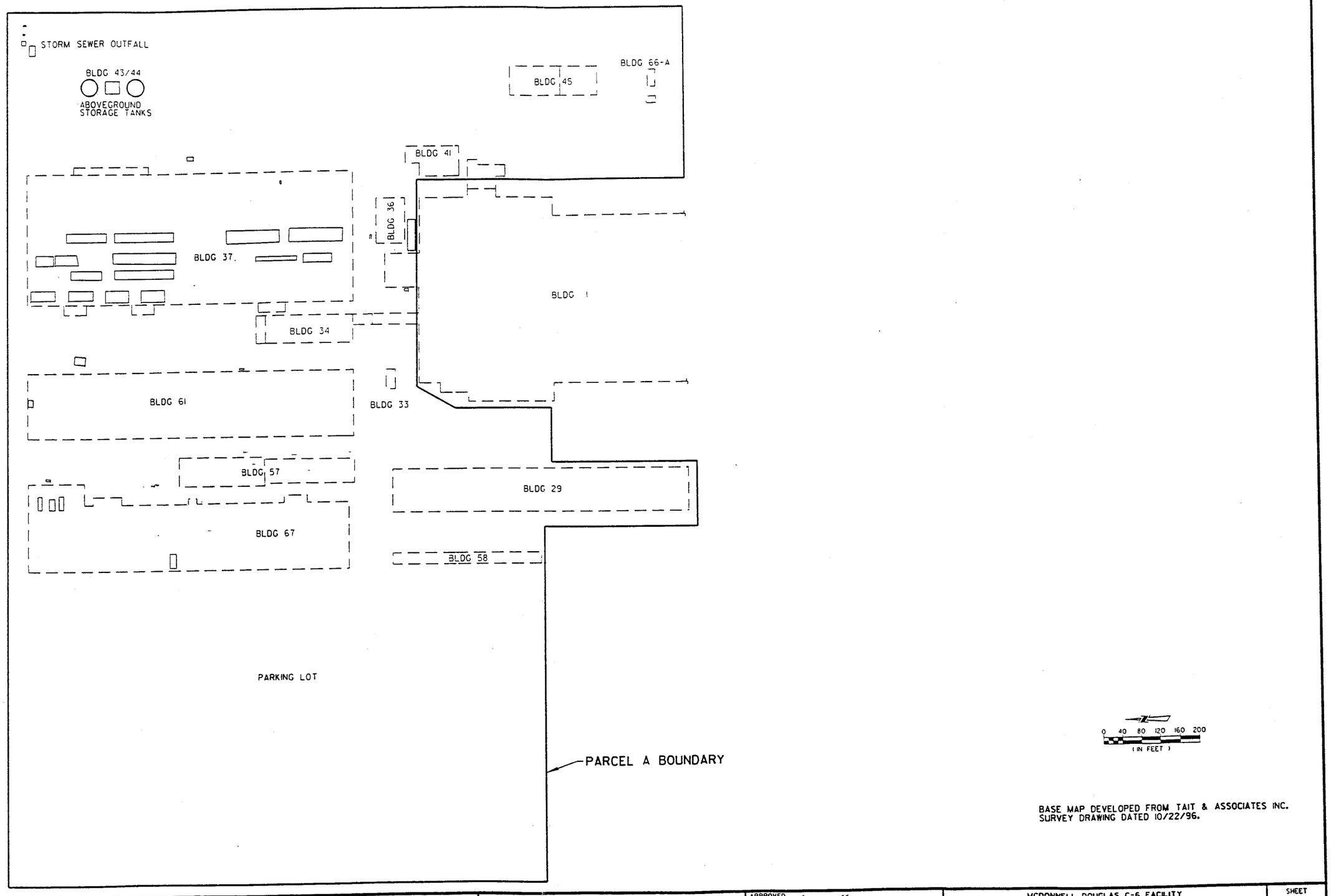
C-6 FACILITY MAP

FIG. 1



Base map developed from Facility Layout and Subject Property Map by Kennedy/Jenks Consultants, May 1996.



BASE MAP DEVELOPED FROM TAIT & ASSOCIATES INC. SURVEY DRAWING DATED 10/22/96.

JOB NO. ____ FILE NO. ____

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

DESIGNED ____
DRAWN N. CHRAKIAN
CHECKED S. REINERS

SUBMITTED
PROJECT ENGINEER ____ R. C. E. NO. ____ DATE ____
RECOMMENDED
MONTGOMERY WATSON ____ R. C. E. NO. ____ DATE ____

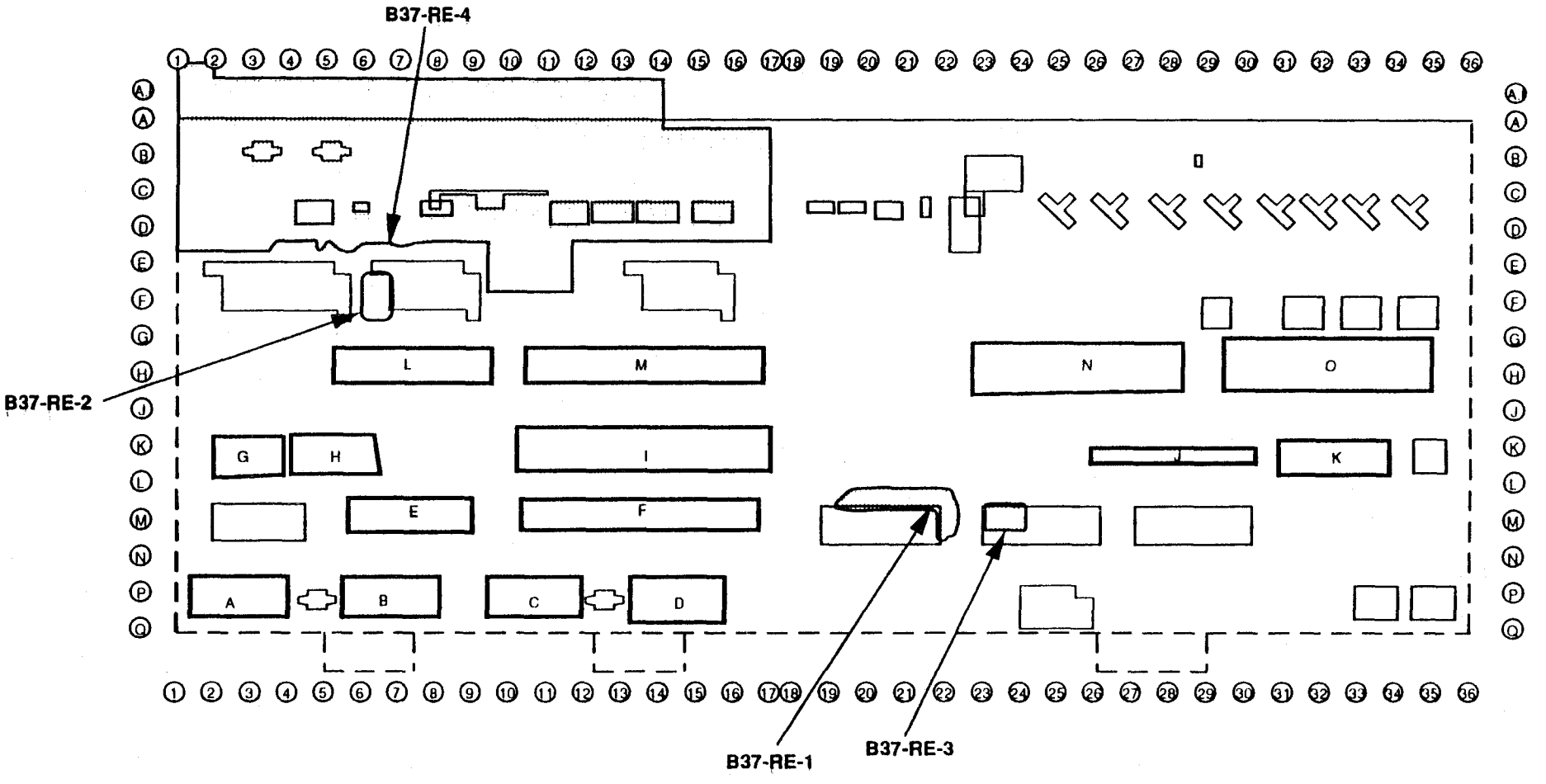
MONTGOMERY WATSON
Pasadena, California

APPROVED ____ 2/5/97 DATE
APPROVED ____ DATE

MCDONNELL DOUGLAS C-6 FACILITY
PARCEL A
SITE MAP

SHEET FIG. 2 OF • SHEETS

BOE-C6-0061649



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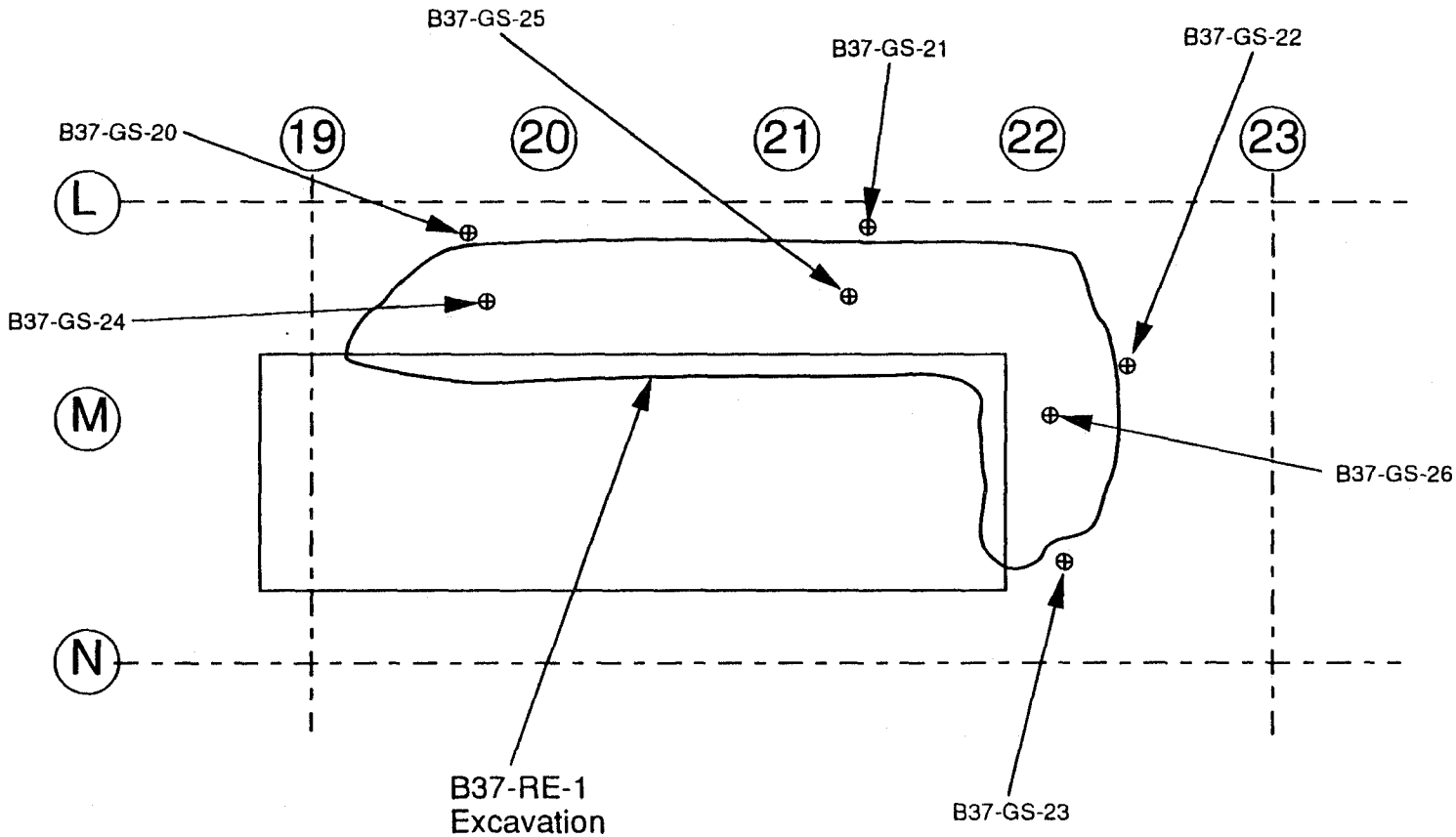
C-6 FACILITY - BUILDING 37

BUILDING 37 GRID OUTLINE AND LOCATIONS OF REMEDIAL EXCAVATIONS

FIGURE 3

BOE-C6-0061650



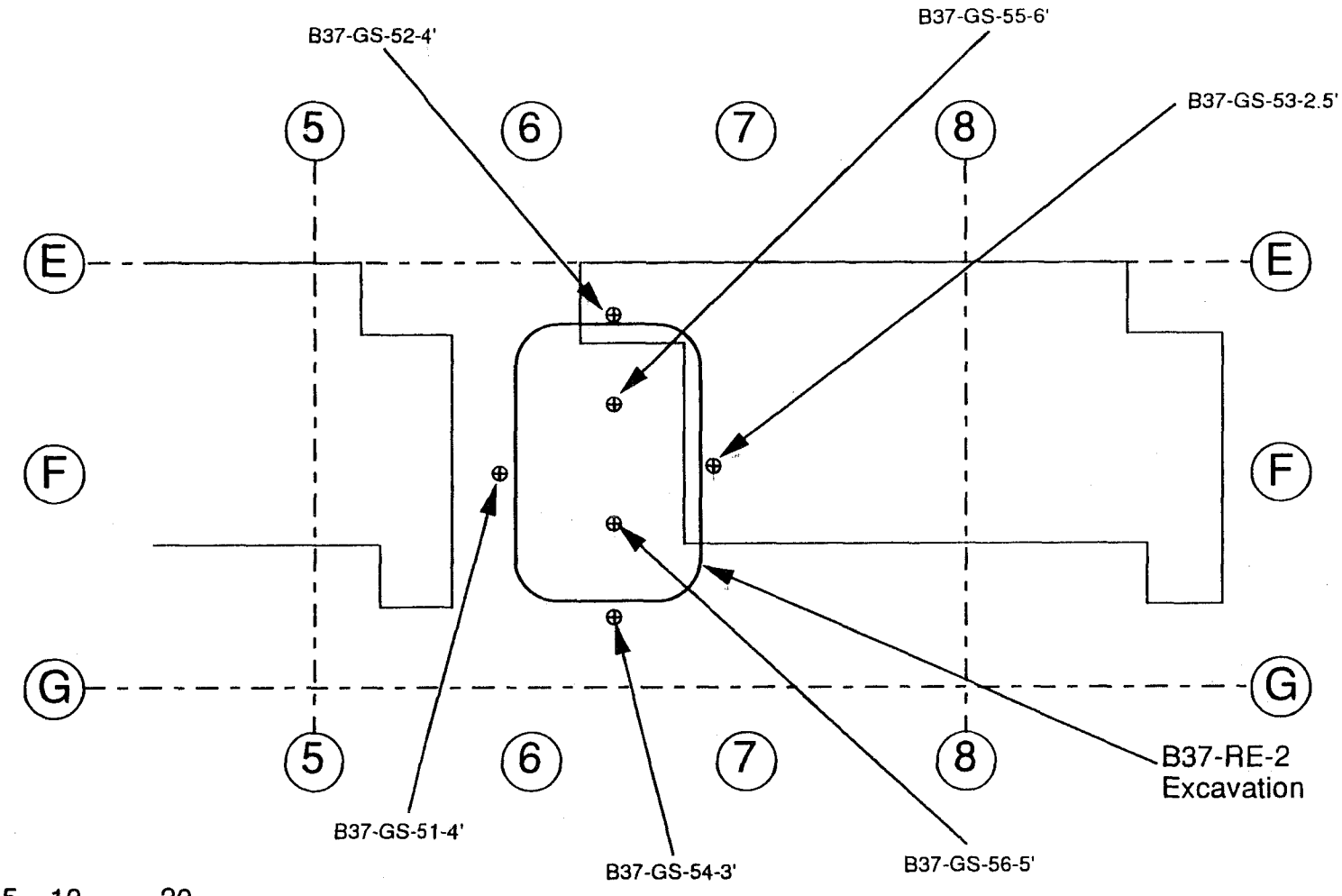
0 5 10 20

Scale
(1/16 inch = 1 feet)

DOUGLAS AIRCRAFT COMPANY
C-6 FACILITY - BUILDING 37

Remedial Excavation B37-RE-1 Confirmation Sample Locations

FIGURE 4



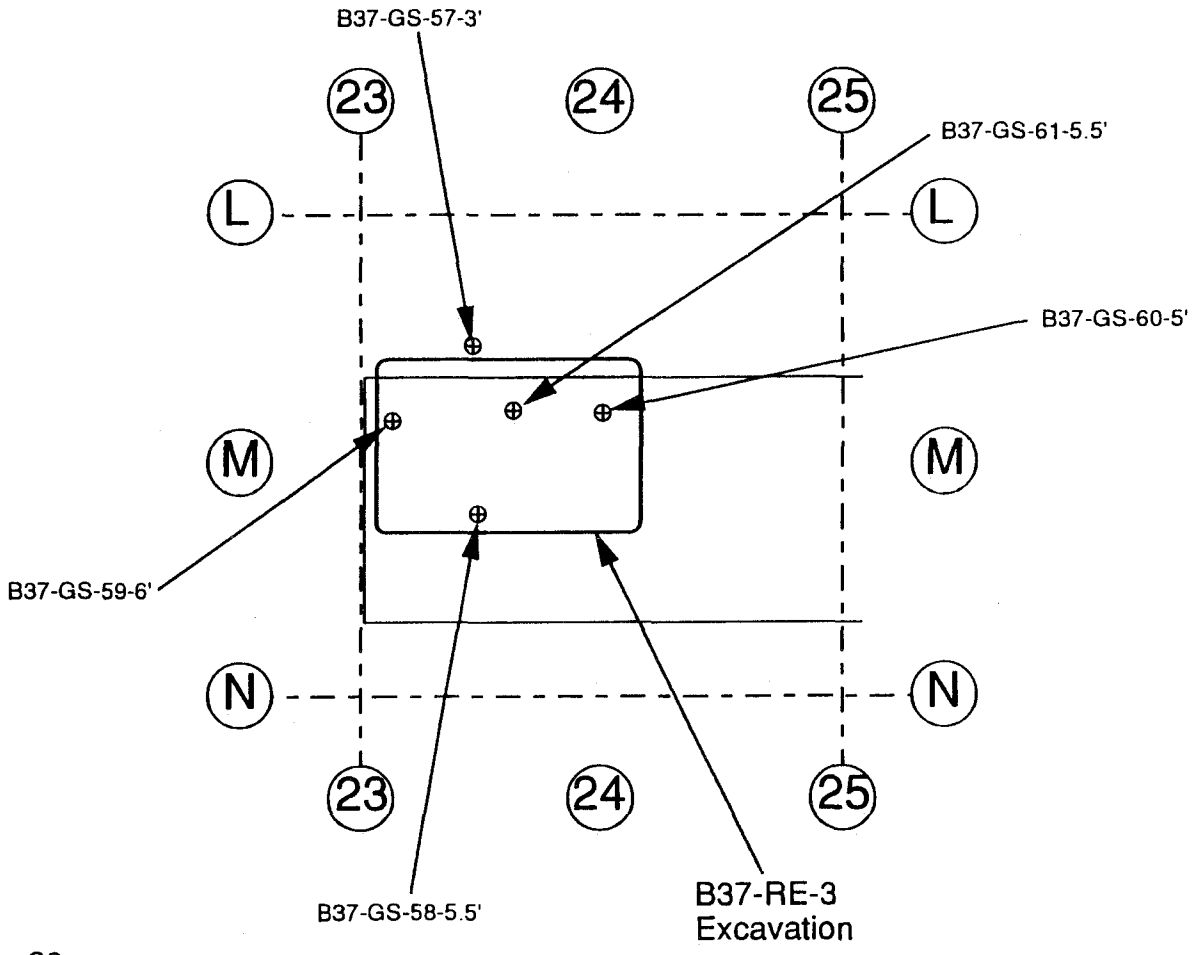
0 5 10 20

Scale
(1/16 inch = 1 feet)

DOUGLAS AIRCRAFT COMPANY
C-6 FACILITY - BUILDING 37

Remedial Excavation B37-RE-2 Confirmation Sample Locations

FIGURE 5



0 5 10 20

Scale
(1/16 inch = 1 feet)

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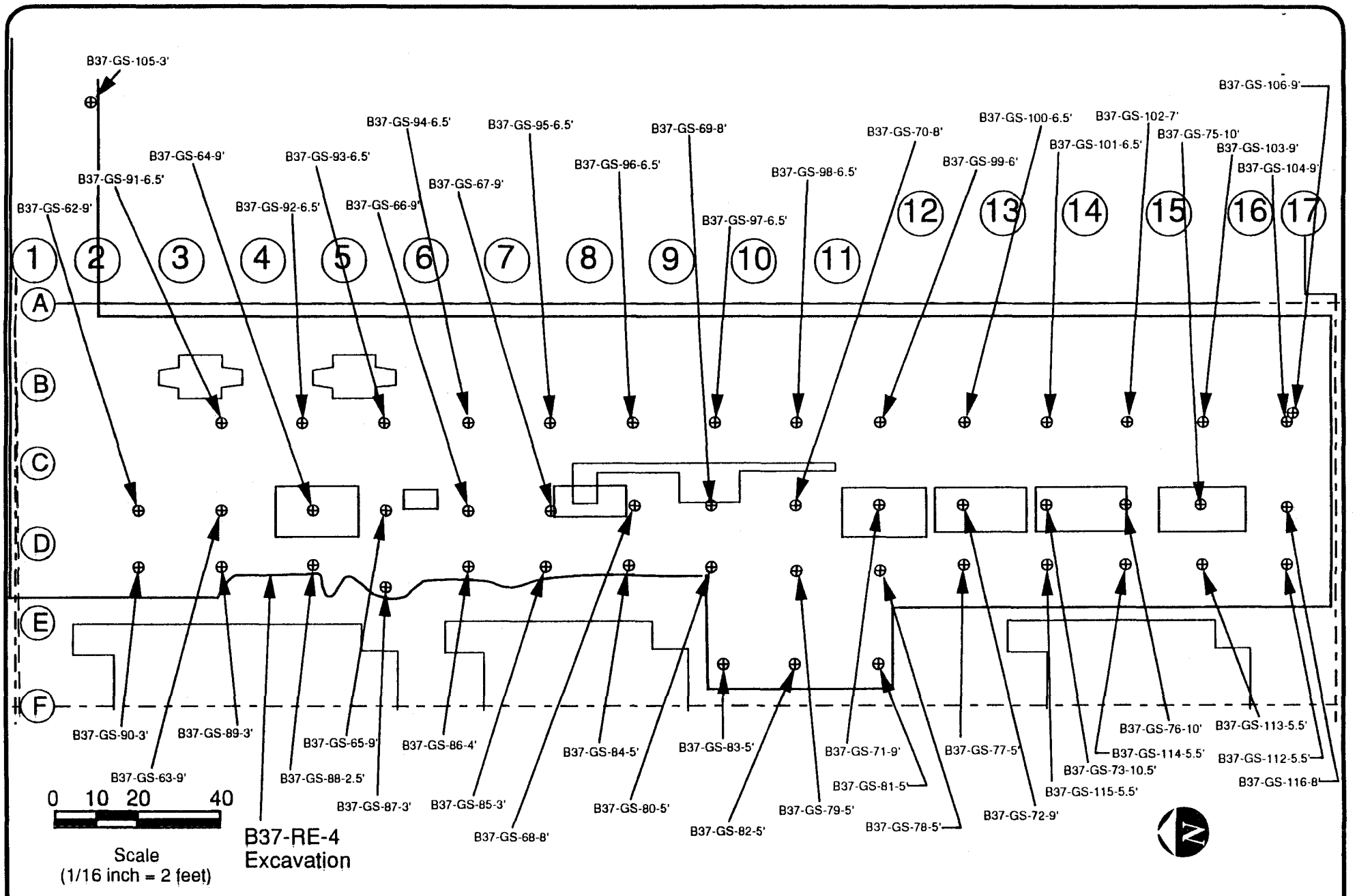
C-6 FACILITY - BUILDING 37

Remedial Excavation B37-RE-3 Confirmation Sample Locations

FIGURE 6

BOE-C6-0061653

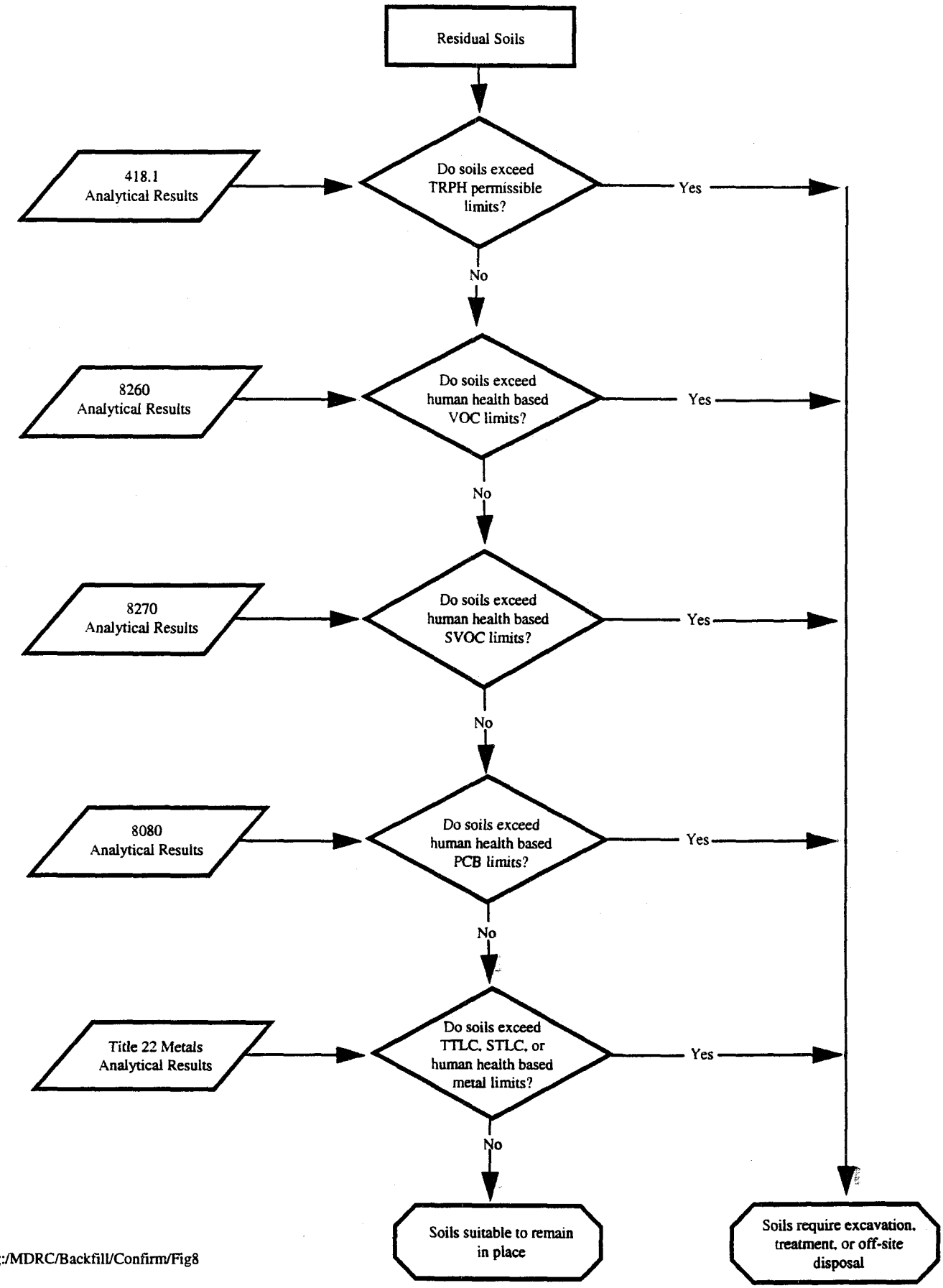


DOUGLAS AIRCRAFT COMPANY
C-6 FACILITY - BUILDING 37

FIGURE 7

Remedial Excavation B37-RE-4 Confirmation Sample Locations

FIGURE 8
Soil Screening Evaluation Process



g:/MDRC/Backfill/Confirm/Fig8

Tables

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TABLE 1

Summary of Soil Sample Analytical Methods

Sample Type	EPA Method	Analyte
Grid Sample	418.1	TRPH (a)
	6000/7000	Metals
	8260	VOCs
	8270	SVOCs
Hot Spot Sample	418.1	TRPH (a)
	6000/7000	Metals
	8260	VOCs (b)
	8270	SVOCs (b)
Stockpile Sample	418.1	TRPH (a)
	6000/7000	Metals
	8260	VOCs
	8270	SVOCs
Confirmation Sample	418.1	TRPH (a)
	6000/7000	Metals
	8260	VOCs (c)
	8270	SVOCs (c)
	8080	PCBs (d)

Notes:
TRPH Total Recoverable Petroleum Hydrocarbons
VOCs Volatile Organic Compounds
SVOCs Semi-volatile Organic Compounds.
PCBs Polychlorinated Biphenyls
(a) Samples exhibiting TRPH concentration greater than 10.000 mg/kg were submitted for carbon chain analysis.
(b) Only the sample with highest TRPH concentration from a hot spot area was analyzed for VOCs and SVOCs.
(c) The number of confirmation samples analyzed for VOCs and SVOCs is approximately equal to the number of stockpile samples analyzed for VOCs and SVOCs. Confirmation samples are selected for analysis of VOCs and SVOCs based on highest TRPH concentration, and location of evenly spaced confirmation sample locations.
(d) Generally, one sample per each remedial excavation is analyzed for PCBs.

TABLE 2
Analytical Data Summary
Remedial Excavation B37-RE-1 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth							Regulatory Levels	
		B37-GS-20 2/7/97 L-20 @ 2' bgs*	B37-GS-21 2/7/97 L-21 @ 2' bgs*	B37-GS-22 2/7/97 M-22.5 @ 2' bgs*	B37-GS-23 2/7/97 M/N-22 @ 1.5' bgs*	B37-GS-24 2/7/97 L/M-20 @ 4' bgs*	B37-GS-25 2/7/97 L/M-21 @ 4' bgs*	B37-GS-26 2/7/97 M-22 @ 4' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<10	<10	<10	<10	<10	56	<10		
Title 22 Metals (mg/kg)										
Antimony	6010	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	500	150
Arsenic	6010	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	500	50
Barium	6010	164	48.9	129	146	116	198	123	10,000	1,000
Beryllium	6010	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	75	7.5
Cadmium	6010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	100	10
Chromium (VI)	7196	--	--	--	--	--	--	--	500	50
Chromium (total)	6010	18.8	6.96	20.0	20.0	17.2	15.0	16.2	2,500	50
Cobalt	6010	10.2	<2.50	10.9	11.2	9.05	8.90	9.89	8,000	800
Copper	6010	17.7	4.34	24.2	29.6	16.0	18.6	13.9	2,500	250
Lead (total)	6010	4.31	<0.500	3.84	3.34	2.39	9.87	2.80	1,000	50
Mercury	7471	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	20	2
Molybdenum	6010	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	3,500	3,500
Nickel	6010	12.8	5.17	16.5	18.7	13.9	10.8	13.5	2,000	200
Selenium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	100	10
Silver	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	500	50
Thallium	6010	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	700	70
Vanadium	6010	42.8	13.4	42.0	47.1	41.0	34.5	41.8	2,400	240
Zinc	6010	52.9	13.8	56.6	55.2	44.8	51.2	40.9	5,000	2,500
VOCs (1) (mg/kg)	8260	--	--	--	--	--		--		
Dichloromethane	8260	--	--	--	--	--	0.035	--		
SVOCs (1) (mg/kg)	8270	--	--	--	--	--	--	--		
PCBs (mg/kg)	8080	--	--	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = none detected
sim dist = simulated distillation
PCBs = polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons

(1) VOCs and SVOCs not listed were not detected
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration

* Refer to Figure 4 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-2 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B37-GS-51-4' 3/3/97 F-6 @ 4' bgs*	B37-GS-52-4' 3/3/97 E-6.5 @ 4' bgs*	B37-GS-53-2.5' 3/3/97 F-7 @ 2.5' bgs*	B37-GS-54-3' 3/3/97 F/G-6.5 @ 3' bgs*	B37-GS-55-6' 3/3/97 E/F-6.5 @ 6' bgs*	B37-GS-56-5' 3/3/97 F-6.5 @ 5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<10	3,900	120	19	<10	<10		
Title 22 Metals (mg/kg)									
Antimony	6010	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	500	150
Arsenic	6010	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	500	50
Barium	6010	96.3	42.4	106	106	185	235	10,000	1,000
Beryllium	6010	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	75	7.5
Cadmium	6010	0.64	0.28	4.14	0.34	0.66	0.26	100	10
Chromium (VI)	7196	--	--	--	--	--	--	500	50
Chromium (total)	6010	16.7	6.87	46.7	15.4	21.6	26.9	2,500	50
Cobalt	6010	9.14	3.31	10.3	10.0	12.7	9.13	8,000	800
Copper	6010	14.4	5.38	25.7	13.8	20.9	26.8	2,500	250
Lead (total)	6010	5.64	3.84	18.3	4.94	5.76	6.26	1,000	50
Mercury	7471	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	20	2
Molybdenum	6010	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	3,500	3,500
Nickel	6010	9.25	<5.00	12.0	9.34	12.4	13.3	2,000	200
Selenium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	100	10
Silver	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	500	50
Thallium	6010	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	700	70
Vanadium	6010	30.8	11.5	36.0	34.3	40.8	48.8	2,400	240
Zinc	6010	40.5	19.9	78.8	37.0	89.5	89.7	5,000	2,500
VOCs (mg/kg)	8260	--	ND	--	--	--	--		
SVOCs (1) (mg/kg)	8270	--		--	--	--	--		
bis (2-Ethylhexyl)Phthalate	8270	--	2.10	--	--	--	--		
PCBs (mg/kg)	8080	--	ND	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = none detected
sim.dist. = simulated distillation
PCBs = polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons

(1) SVOCs not listed were not detected
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration

* Refer to Figure 5 for sample locations

TABLE 4
Analytical Data Summary
Remedial Excavation B37-RE-3 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-57-3' 3/3/97 L/M-23.5 @ 3' bgs*	B37-GS-58-5.5' 3/3/97 M/N-23.5 @ 5.5' bgs*	B37-GS-59-6' 3/3/97 M-23 @ 6' bgs*	B37-GS-60-5' 3/3/97 M-24 @ 5' bgs*	B37-GS-61-5.5' 3/3/97 M-23.5 @ 5.5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	25	<10	49	<10	<10		
Title 22 Metals (mg/kg)								
Antimony	6010	<0.500	<0.500	<0.500	<0.500	<0.500	500	150
Arsenic	6010	<0.11	<0.11	<0.11	<0.11	<0.11	500	50
Barium	6010	125	103	124	124	126	10,000	1,000
Beryllium	6010	<0.06	<0.06	<0.06	<0.06	<0.06	75	7.5
Cadmium	6010	0.20	0.42	0.26	0.35	0.52	100	10
Chromium (VI)	7196	--	--	--	--	--	500	50
Chromium (total)	6010	20.2	16.1	21.2	21.0	15.3	2,500	50
Cobalt	6010	11.0	10.0	10.3	11.8	10.6	8,000	800
Copper	6010	16.8	15.6	23.0	21.6	14.7	2,500	250
Lead (total)	6010	4.78	4.64	5.90	5.18	4.81	1,000	50
Mercury	7471	<0.200	<0.200	<0.200	<0.200	<0.200	20	2
Molybdenum	6010	<2.50	<2.50	<2.50	<2.50	<2.50	3,500	3,500
Nickel	6010	15.0	10.2	13.8	15.5	10.1	2,000	200
Selenium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	100	10
Silver	6010	<5.00	<5.00	<5.00	<5.00	<5.00	500	50
Thallium	6010	<0.500	<0.500	<0.500	<0.500	<0.500	700	70
Vanadium	6010	45.2	32.6	45.6	42.2	33	2,400	240
Zinc	6010	55.5	47.2	67.4	62.4	46.8	5,000	2,500
VOCs (mg/kg)	8260	--	--	ND	--	--		
SVOCs (mg/kg)	8270	--	--	ND	--	--		
PCBs (mg/kg)	8080	--	--	ND	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = none detected
sim.dist. = simulated distillation
PCBs = polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration

* Refer to Figure 6 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 1 of 10

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-62-9' 3/5/97 C/D-2.5 @ 9' bgs*	B37-GS-63-9' 3/5/97 C/D-3.5 @ 9' bgs*	B37-GS-64-9' 3/5/97 C/D-4.5 @ 9' bgs*	B37-GS-65-9' 3/5/97 C/D-5.5 @ 9' bgs*	B37-GS-66-9' 3/5/97 C/D-6.5 @ 9' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<10	25	<10	<10	<10		
Title 22 Metals (mg/kg)								
Antimony	6010	<0.500	<0.500	<0.500	<0.500	<0.500	500	150
Arsenic	6010	<0.11	<0.11	<0.11	<0.11	<0.11	500	50
Barium	6010	191	126	138	164	42.6	10,000	1,000
Beryllium	6010	<0.06	<0.06	<0.06	<0.06	<0.06	75	7.5
Cadmium	6010	0.59	0.61	0.68	0.80	0.40	100	10
Chromium (VI)	7196	--	--	--	--	--	500	50
Chromium (total)	6010	20.2	15.7	16.9	10.6	6.17	2,500	50
Cobalt	6010	25.3	14.4	24.4	17.9	5.47	8,000	800
Copper	6010	23.7	18.4	25.9	19.1	8.18	2,500	250
Lead (total)	6010	6.09	4.31	5.16	3.88	2.11	1,000	50
Mercury	7471	<0.200	<0.200	<0.200	<0.200	<0.200	20	2
Molybdenum	6010	<2.50	<2.50	<2.50	<2.50	<2.50	3,500	3,500
Nickel	6010	11.5	8.98	10.5	7.73	<5.00	2,000	200
Selenium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	100	10
Silver	6010	<5.00	<5.00	<5.00	<5.00	<5.00	500	50
Thallium	6010	<0.500	<0.500	<0.500	<0.500	<0.500	700	70
Vanadium	6010	42.4	36.5	39.8	29.3	14.5	2,400	240
Zinc	6010	85.4	67.9	76.6	45.2	31.8	5,000	2,500
VOCs (mg/kg)	8260	--	ND	--	ND	--		
SVOCs (1) (mg/kg)	8270	--		--		--		
bis (2-Ethylhexyl)Phthalate	8260	--	<0.330	--	<0.330	--		
PCBs (mg/kg)	8080	--	ND	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 2 of 10

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-67-9' 3/5/97 C/D-7.5 @ 9' bgs*	B37-GS-68-8' 3/5/97 C/D-8.5 @ 8' bgs*	B37-GS-69-8' 3/5/97 C/D-9.5 @ 8' bgs*	B37-GS-70-8' 3/6/97 C/D-10.5 @ 8' bgs*	B37-GS-71-9' 3/6/97 C/D-11.5 @ 9' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<10	<10	<10	62	87		
Title 22 Metals (mg/kg)								
Antimony	6010	<0.500	<0.500	<0.500	<0.500	<0.500	500	150
Arsenic	6010	<0.11	<0.11	<0.11	<0.11	<0.11	500	50
Barium	6010	122	134	106	95.7	63.6	10,000	1,000
Beryllium	6010	<0.06	<0.06	<0.06	<0.06	<0.06	75	7.5
Cadmium	6010	0.82	0.51	0.59	0.31	0.17	100	10
Chromium (VI)	7196	--	--	--	--	--	500	50
Chromium (total)	6010	10.5	9.56	7.05	19.6	7.57	2,500	50
Cobalt	6010	10.9	14.8	6.06	20.0	3.48	8,000	800
Copper	6010	14.2	15.5	11.1	25.9	9.26	2,500	250
Lead (total)	6010	3.40	3.13	2.25	5.22	1.91	1,000	50
Mercury	7471	<0.200	<0.200	<0.200	<0.200	<0.200	20	2
Molybdenum	6010	<2.50	<2.50	<2.50	<2.50	<2.50	3,500	3,500
Nickel	6010	7.26	6.59	<5.00	10.1	<5.00	2,000	200
Selenium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	100	10
Silver	6010	<5.00	<5.00	<5.00	<5.00	<5.00	500	50
Thallium	6010	<0.500	<0.500	<0.500	<0.500	<0.500	700	70
Vanadium	6010	26.6	30.1	20.1	40.1	16.6	2,400	240
Zinc	6010	50.7	35.8	32.8	79	36.8	5,000	2,500
VOCs (mg/kg)	8260	ND	ND	--	ND	ND		
SVOCs (1) (mg/kg)	8270			--				
bis (2-Ethylhexyl)Phthalate	8260	<0.330	<0.330	--	<0.330	<0.330		
PCBs (mg/kg)	8080	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-72-9' 3/6/97 C/D-12.5 @ 9' bgs*	B37-GS-73-10.5' 3/6/97 C/D-13.5 @ 10.5' bgs*	B37-GS-75-10' 3/12/97 C/D-15.5 @ 10' bgs*	B37-GS-76-10' 3/12/97 C/D-14.5 @ 10' bgs*	B37-GS-77-5' 3/12/97 D/E-12.5 @ 5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	93	49	<8.0	<8.0	36		
Title 22 Metals (mg/kg)								
Antimony	6010	<0.500	<0.500	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<0.11	<0.11	<1.0	<1.0	<1.0	500	50
Barium	6010	88.0	133	110	100	230	10,000	1,000
Beryllium	6010	<0.06	<0.06	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	0.60	1.15	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	--	--	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	21.2	30.4	33	33	36	2,500	50
Cobalt	6010	17.9	15.8	8.7	9.7	6.0	8,000	800
Copper	6010	21.8	33.5	18	24	17	2,500	250
Lead (total)	6010	4.12	5.06	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.200	<0.200	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<2.50	<2.50	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	14.3	34.1	20	20	9.5	2,000	200
Selenium	6010	<5.00	<5.00	<1.0	<1.0	<1.0	100	10
Silver	6010	<5.00	<5.00	<0.1	<0.1	<0.1	500	50
Thallium	6010	<0.500	<0.500	<5.0	<5.0	<5.0	700	70
Vanadium	6010	33.1	57.7	34	35	39	2,400	240
Zinc	6010	110	179	100	13	58	5,000	2,500
VOCs (mg/kg)	8260	ND	ND	ND	--	ND		
SVOCs (1) (mg/kg)	8270				--			
bis (2-Ethylhexyl)Phthalate	8260	<0.330	<0.330	<0.100	--	<0.100		
PCBs (mg/kg)	8080	ND	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-78-5' 3/12/97 D/E-11.5 @ 5' bgs*	B37-GS-79-5' 3/12/97 D/E-10.5 @ 5' bgs*	B37-GS-80-5' 3/12/97 D/E-9.5 @ 5' bgs*	B37-GS-81-5' 3/12/97 E/F-11.5 @ 5' bgs*	B37-GS-82-5' 3/12/97 E/F-10.5 @ 5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0		
Title 22 Metals (mg/kg)								
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	190	180	50	140	150	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	31	33	30	31	34	2,500	50
Cobalt	6010	9.4	8.4	9.4	11	9.1	8,000	800
Copper	6010	13	12	12	14	14	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	10	10	9.4	9.3	11	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	31	34	30	31	32	2,400	240
Zinc	6010	64	66	57	64	70	5,000	2,500
VOCs (mg/kg)	8260	--	ND	--	--	ND		
SVOCs (1) (mg/kg)	8270	--		--	--			
bis (2-Ethylhexyl)Phthalate	8260	--	<0.100	--	--	<0.100		
PCBs (mg/kg)	8080	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-83-5' 3/12/97 E/F-9.5 @ 5' bgs*	B37-GS-84-5' 3/12/97 D/E-8.5 @ 5' bgs*	B37-GS-85-3' 3/12/97 D/E-7.5 @ 3' bgs*	B37-GS-86-4' 3/13/97 D/E-6.5 @ 4' bgs*	B37-GS-87-3' 3/13/97 D/E-5.5 @ 3' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	80	270		
Title 22 Metals (mg/kg)								
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	160	250	130	47	92	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	32	38	26	11	21	2,500	50
Cobalt	6010	10	5.7	7.4	2.5	6.2	8,000	800
Copper	6010	14	13	10	6.0	12	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	10	10	12	4.7	9.5	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	31	33	30	12	25	2,400	240
Zinc	6010	66	60	41	22	39	5,000	2,500
VOCs (mg/kg)	8260	--	ND	--	--	--		
SVOCs (1) (mg/kg)	8270	--		--	--	--		
bis (2-Ethylhexyl)Phthalate	8260	--	<0.100	--	--	--		
PCBs (mg/kg)	8080	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

		Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
Analyte	EPA Method	B37-GS-88-2.5' 3/13/97 D/E-4.5 @ 2.5' bgs*	B37-GS-89-3' 3/13/97 D/E-3.5 @ 3' bgs*	B37-GS-90-3' 3/13/97 D/E-2.5 @ 3' bgs*	B37-GS-91-6.5' 3/21/97 B/C-3.5 @ 6.5' bgs*	B37-GS-92-6.5' 3/21/97 B/C-4.5 @ 6.5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	1,100	110	15	<8.0	38		
Title 22 Metals (mg/kg)								
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	100	67	100	160	200	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	12	14	24	44	33	2,500	50
Cobalt	6010	2.9	4.3	8.2	8.5	4.6	8,000	800
Copper	6010	5.3	7.3	11	19	14	2,500	250
Lead (total)	6010	11	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	8.2	6.9	9.7	12	9.2	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	14	16	27	39	33	2,400	240
Zinc	6010	30	29	44	73	57	5,000	2,500
VOCs (mg/kg)	8260	ND	--	--	--	--		
SVOCs (1) (mg/kg)	8270		--	--	--	--		
bis (2-Ethylhexyl)Phthalate	8260	<0.100	--	--	--	--		
PCBs (mg/kg)	8080	ND	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-93-6.5' 3/21/97 B/C-5.5 @ 6.5' bgs*	B37-GS-94-6.5' 3/21/97 B/C-6.5 @ 6.5' bgs*	B37-GS-95-6.5' 3/21/97 B/C-7.5 @ 6.5' bgs*	B37-GS-96-6.5' 3/21/97 B/C-8.5 @ 6.5' bgs*	B37-GS-97-6.5' 3/21/97 B/C-9.5 @ 6.5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0		
Title 22 Metals (mg/kg)								
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	150	150	90	180	120	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	38	38	22	29	21	2,500	50
Cobalt	6010	11	9.4	3.5	4.8	4.5	8,000	800
Copper	6010	22	18	12	15	9.4	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	10	8.9	5.1	8.0	5.7	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	40	38	28	35	29	2,400	240
Zinc	6010	67	54	36	49	34	5,000	2,500
VOCs (mg/kg)	8260	--	--	ND	--	ND		
SVOCs (1) (mg/kg)	8270	--	--		--			
bis (2-Ethylhexyl)Phthalate	8260	--	--	<0.100	--	<0.100		
PCBs (mg/kg)	8080	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 8 of 10

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-98-6.5' 3/21/97 B/C-10.5 @ 6.5' bgs*	B37-GS-99-6' 3/21/97 B/C-11.5 @ 6' bgs*	B37-GS-100-6.5' 3/21/97 B/C-12.5 @ 6.5' bgs*	B37-GS-101-6.5' 3/21/97 B/C-13.5 @ 6.5' bgs*	B37-GS-102-7' 3/21/97 B/C-14.5 @ 7' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	210		
Title 22 Metals (mg/kg)								
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	130	120	130	230	140	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	32	36	35	42	41	2,500	50
Cobalt	6010	7.1	7.3	9.4	7.3	10	8,000	800
Copper	6010	12	9.7	9.5	17	16	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	13	15	13	11	12	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	34	38	37	46	41	2,400	240
Zinc	6010	46	40	42	70	72	5,000	2,500
VOCs (mg/kg)	8260	--	ND	--	--	--		
SVOCs (1) (mg/kg)	8270	--		--	--	--		
bis (2-Ethylhexyl)Phthalate	8260	--	<0.100	--	--	--		
PCBs (mg/kg)	8080	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels	
		B37-GS-103-9' 3/21/97 B/C-15.5 @ 9' bgs*	B37-GS-104-9' 3/21/97 B/C-16.5 @ 9' bgs*	B37-GS-105-3' 3/25/97 50' east of A-2 @ 3' bgs*	B37-GS-106-9' 3/25/97 B/C-16.5 @ 9' bgs*	B37-GS-112-5.5' 3/31/97 D/E-16.5 @ 5.5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	77 (74 by 8015 diesel)	<8.0	15		
Title 22 Metals (mg/kg)								
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	100	140	120	140	92	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	40	37	34	25	24	2,500	50
Cobalt	6010	13	18	7.5	17	11	8,000	800
Copper	6010	16	15	20	9.8	14	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	15	13	13	11	8.5	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	42	42	33	30	24	2,400	240
Zinc	6010	82	80	57	59	45	5,000	2,500
VOCs (mg/kg)	8260	--	--	ND	ND	ND		
SVOCs (1) (mg/kg)	8270	--	--					
bis (2-Ethylhexyl)Phthalate	8260	--	--	<0.100	<0.100	<0.100		
PCBs (mg/kg)	8080	--	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 5
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth				Regulatory Levels	
		B37-GS-113-5.5' 3/31/97 D/E-15.5 @ 5.5' bgs*	B37-GS-114-5.5' 3/31/97 D/E-14.5 @ 5.5' bgs*	B37-GS-115-5.5' 3/31/97 D/E-13.5 @ 5.5' bgs*	B37-GS-116-8' 3/31/97 C/D-16.5 @ 8' bgs*	TTLC (mg/kg)	10X STLC (mg/L)
TRPH (mg/kg)	418.1	14	13	28	<8.0		
Title 22 Metals (mg/kg)							
Antimony	6010	<5.0	<5.0	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	500	50
Barium	6010	87	77	120	120	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	500	50
Chromium (total)	6010	35	43	37	38	2,500	50
Cobalt	6010	9.2	16	9.6	13	8,000	800
Copper	6010	18	27	20	16	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	3,500	3,500
Nickel	6010	11	13	15	11	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	700	70
Vanadium	6010	40	53	35	36	2,400	240
Zinc	6010	56	69	92	69	5,000	2,500
VOCs (mg/kg)	8260	ND	ND	ND	ND		
SVOCs (1) (mg/kg)	8270						
bis (2-Ethylhexyl)Phthalate	8260	<0.100	<0.100	<0.100	<0.100		
PCBs (mg/kg)	8080	--	--	--	--		

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = none detected
PCBs = polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 7 for sample locations

TABLE 6
Draft Health-Based Screening Criteria (HBSC)
(Page 1 of 4)

Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
1,1,1,2-tetrachloroethane	4.19E+02	2.40E+03	4.19E+02
1,1,2,2-tetrachloroethane	5.29E+01	2.50E+02	5.29E+01
1,1,2-trichloroethane	1.56E+02	1.59E+02	1.56E+02
1,1-dichloroethane	1.06E+03	1.88E+02	1.88E+02
1,1-dichloroethene	1.58E+00	6.82E-02	6.82E-02
1,2,3-trichloropropane	1.97E+00	NA	1.97E+00
1,2,4-trichlorobenzene	1.74E+02	7.91E+06	1.74E+02
1,2-dibromo-3-chloropropane	2.09E+00	1.25E+01	2.09E+00
1,2-dibromoethane	4.71E+00	4.08E+01	4.71E+00
1,2-dichlorobenzene	NA	1.00E+06	1.00E+06
1,2-dichloroethane	1.14E+02	3.76E+01	3.76E+01
1,2-dichloropropane	6.74E+00	1.21E+00	1.21E+00
1,2-diphenylhydrazine	2.03E+01	3.93E+07	2.03E+01
1,3-dichloropropene	3.69E+01	1.11E+02	3.69E+01
1,4-dichlorobenzene	3.97E+02	7.30E+03	3.97E+02
2,4,5-trichlorophenol	1.70E+04	NA	1.70E+04
2,4,6-trichlorophenol	2.51E+02	1.84E+06	2.51E+02
2,4-dichlorophenol	5.15E+01	NA	5.15E+01
2,4-dimethylphenol	3.46E+03	NA	3.46E+03
2,4-dinitrophenol	1.98E+00	NA	1.98E+00
2,4-dinitrotoluene	3.48E+01	1.27E+06	3.48E+01
2,6-dinitrotoluene	2.58E+01	NA	2.58E+01
2-butanone	2.66E+04	3.92E+05	2.66E+04
2-chlorophenol	8.04E+02	NA	8.04E+02
2-methylphenol	8.44E+03	NA	8.44E+03
2-naphthylamine	9.79E+00	2.72E+05	9.79E+00
3,3-dichlorobenzidine	1.47E+01	1.25E+08	1.47E+01
4,4-ddd	1.03E+02	1.67E+08	1.03E+02
4,4-dde	7.24E+01	4.72E+05	7.24E+01
4,4-ddt	1.22E+01	3.78E+07	1.22E+01
4-chloroaniline	6.76E+01	NA	6.76E+01
4-methyl-2-pentanone	7.68E+03	1.14E+05	7.68E+03
4-methylphenol	8.59E+01	NA	8.59E+01
acenaphthene	7.98E+03	NA	7.98E+03
acetone	1.74E+04	NA	1.74E+04

TABLE 6
Draft Health-Based Screening Criteria (HBSC)
(Page 2 of 4)

Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
aldrin	7.33E-01	4.50E+03	7.33E-01
alpha-bhc	3.91E+00	3.87E+04	3.91E+00
aniline	7.38E+02	1.70E+06	7.38E+02
anthracene	4.06E+03	NA	4.06E+03
antimony	9.05E+00	NA	9.05E+00
aroclor 1254	8.72E-01	NA	8.72E-01
arsenic	8.87E+00	NA	8.87E+00
barium	2.52E+03	NA	2.52E+03
benzene	7.87E+01	2.50E+01	2.50E+01
benzidine	3.47E-02	2.58E+01	3.47E-02
benzo(a)anthracene	1.14E+01	3.32E+08	1.14E+01
benzo(a)pyrene	1.14E+00	1.60E+07	1.14E+00
benzo(b)fluoranthene	1.14E+01	5.35E+07	1.14E+01
benzo(k)fluoranthene	1.14E+01	1.60E+07	1.14E+01
benzoic acid	6.97E+04	NA	6.97E+04
benzyl alcohol	1.74E+04	NA	1.74E+04
benzyl chloride	8.79E+01	6.72E+02	8.79E+01
beryllium**	1.82E+02	NA	1.82E+02
beta-bhc	1.37E+01	1.65E+06	1.37E+01
beta-chloronaphthalene***	NA	3.92E+06	3.92E+06
bis(2-chloro-1-methylethyl)ether	2.35E+02	4.88E+03	2.35E+02
bis(2-chloroethyl)ether	6.34E+00	1.15E+02	6.34E+00
bis(2-ethylhexyl)phthalate	2.10E+03	1.31E+10	2.10E+03
bromodichloromethane	1.45E+01	NA	1.45E+01
bromoform	3.49E+02	1.32E+04	3.49E+02
bromomethane	NA	1.92E+01	1.92E+01
cadmium**	1.64E+01	NA	1.64E+01
carbon disulfide	8.27E+02	1.17E+04	8.27E+02
carbon tetrachloride	6.18E+01	3.12E+01	3.12E+01
chlorobenzene	NA	1.08E+04	1.08E+04
chloroform	1.85E+02	1.35E+02	1.35E+02
chloromethane	2.64E+02	1.23E+01	1.23E+01
chromium iii	3.22E+04	NA	3.22E+04
chromium vi	9.73E+01	NA	9.73E+01
chrysene	1.14E+02	2.32E+09	1.14E+02

TABLE 6
Draft Health-Based Screening Criteria (HBSC)
(Page 3 of 4)

Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
cis-1,2-dichloroethene	1.74E+03	NA	1.74E+03
copper	1.26E+03	NA	1.26E+03
cumene	1.34E+03	9.56E+03	1.34E+03
dibenzo(a,h)anthracene	3.35E+00	1.06E+11	3.35E+00
dibromochloromethane	1.02E+02	5.63E+01	5.63E+01
dichlorodifluoromethane	4.80E+02	1.17E+02	1.17E+02
dieldrin	1.22E+00	3.87E+03	1.22E+00
diethyl phthalate	1.39E+05	NA	1.39E+05
di-n-butylphthalate	1.74E+04	NA	1.74E+04
di-n-octylphthalate	3.49E+02	NA	3.49E+02
endosulfan	1.47E+02	NA	1.47E+02
endrin	7.33E+00	NA	7.33E+00
ethyl chloride	2.84E+04	2.61E+05	2.84E+04
ethylbenzene	NA	1.56E+05	1.56E+05
fluoranthene	6.97E+03	NA	6.97E+03
fluorene	6.97E+03	NA	6.97E+03
gamma-bhc	2.30E+01	4.39E+04	2.30E+01
heptachlor	2.77E+00	2.97E+02	2.77E+00
heptachlor epoxide	3.18E-01	2.25E+02	3.18E-01
hexachlorobenzene	9.20E+00	4.66E+02	9.20E+00
hexachlorobutadiene	2.13E+02	1.19E+04	2.13E+02
hexachlorocyclopentadiene	1.88E+01	1.63E+02	1.88E+01
hexachloroethane	1.74E+02	4.00E+04	1.74E+02
indeno(1,2,3-cd)pyrene	1.47E+01	2.05E+10	1.47E+01
isophorone	1.81E+04	NA	1.81E+04
mercury	6.78E+00	NA	6.78E+00
methylene chloride	8.31E+02	2.20E+02	2.20E+02
molybdenum	1.24E+03	NA	1.24E+03
n-butylbenzyl phthalate	3.49E+03	NA	3.49E+03
nickel	3.70E+02	NA	3.70E+02
nitroaniline, o-	1.62E+03	4.08E+05	1.62E+03
nitrobenzene	8.20E+01	2.97E+04	8.20E+01
nitrosodiphenylamine, p-	7.95E+02	1.72E+06	7.95E+02
n-nitrosodimethylamine	1.10E+00	NA	1.10E+00
n-nitroso-di-n-propylamine	2.33E+00	7.44E+01	2.33E+00

TABLE 6
Draft Health-Based Screening Criteria (HBSC)
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Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
n-nitrosodiphenylamine	1.94E+03	4.20E+06	1.94E+03
o-chlorotoluene	3.49E+03	NA	3.49E+03
pentachlorophenol	3.05E+02	2.17E+09	3.05E+02
phenol	1.05E+04	NA	1.05E+04
pyrene	2.35E+03	NA	2.35E+03
selenium	1.77E+02	NA	1.77E+02
silver	5.98E+01	NA	5.98E+01
styrene	6.03E+04	1.26E+06	6.03E+04
tetrachloroethene	2.48E+02	8.20E+01	8.20E+01
toluene	3.70E+04	3.71E+04	3.70E+04
trans-1,2-dichloroethene	3.49E+03	NA	3.49E+03
trichloroethene	7.08E+02	3.41E+02	3.41E+02
trichlorofluoromethane	6.27E+03	8.16E+03	6.27E+03
vanadium	8.37E+01	NA	8.37E+01
vinyl acetate	1.44E+03	3.86E+04	1.44E+03
vinyl chloride	3.13E-01	8.05E-03	8.05E-03
xylenes***	2.16E+04	1.35E+06	2.16E+04
zinc	8.26E+03	NA	8.26E+03

Notes:

NA The required toxicity factors (subchronic - const. or inhalation - C/I) under the applicable exposure scenario were unavailable

* All HBSC are base on a hazard quotient of 0.2 and an incremental lifetime cancer risk of $1X10^{-6}$

** No oral cancer potency factor was used for these compounds based on conversations with Jim Collins at Air Toxicology and Epidemiology Section (ATES), Office of Environmental Health Hazard Assessment (OEHHA), April 30, 1997

*** Due to the lack of toxicity data, chronic oral toxicity factors were used as inhalation toxicity factors for the purposes of deriving acceptable HBSC values